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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,863	02/27/2002	Mark Austin	00780	1668

45695 7590 05/04/2005

WITHERS & KEYS FOR BELL SOUTH  
P. O. BOX 71355  
MARIETTA, GA 30007-1355

EXAMINER
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NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



**Office Action Summary**

Application No.

10/085,863

Applicant(s)

AUSTIN ET AL.

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |



## DETAILED ACTION

### *Remarks*

1. Applicants selects group I (claims 1-13) for examination without traverse in paper received 09/01/04.

### *Claim Rejections - 35 USC 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --*

*(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

3. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chawla et al. (U.S. Patent No. 6,496,700 B1).

Regarding claim 1, Chawla discloses "a method of measuring frequency interference between a plurality of cell sites in a wireless telecommunications system, the method comprising: selecting a frequency in a cell site to be used as a beacon frequency; activating the beacon frequency in the cell site; recording, at a telecommunications switch, a signal strength of the beacon frequency as measured by a first wireless device operating in the cell site and a signal strength of the beacon frequency as measured by a second wireless device operating in another cell site; and determining the frequency interference between the cell site and the other cell site



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based on the signal strengths” (Figs. 2 & 3, and col. 3/lines 23-45, col. 6/lines 25-39, table 1-1 for signal strengths measured from adjacent base station cells, and col. 16/table 5 for C/I ratio signals for neighbor list of C/I of two adjacent cells).

As for claims 2-3 and 8, Chawla discloses “wherein the cell sites are adjacent cell sites” (Fig. 1 & 2); and further “comprising removing the beacon frequency from availability for use in the system by wireless device users”, i.e., beacon frequency is simply a test signal, and it can be removed from availability for use in the system (col. 6/lines 25-39).

As for claim 4, Chawla discloses “wherein measuring the frequency interference includes constructing a carrier/interference matrix” (col. 4/lines 49-54; and Table 5 in col. 16 shows a C/I matrix).

As for claim 5, Chawla discloses further “comprising de-activating the beacon frequency after the signal strengths are recorded”, i.e., beacon frequency just being activated for a period of time, and as soon as measurements are recorded or collected by the base station in the matrix from as disclosed above, the beacon frequency are not used or activated (refer to col. 15/lines 1-29).

As for claims 6 and 7, Chawla shows “wherein selecting a frequency includes selecting a frequency that is a least-used frequency” and “wherein selecting a frequency includes selecting a guard frequency” (col. 6/lines 24-39).

As for claim 9, Chawla discloses further “comprising repeating the method for all cell sites in the telecommunications system” (Fig. 3 for procedures in frequency reuse scheme in the telecommunication system, see col. 16/line 26 to col. 18/line 64 for the procedure repeats as necessary).



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As for claims 10 and 11, Chawla further discloses “comprising adding the beacon frequency to a list of frequencies” and “wherein adding the beacon frequency to a list of frequencies includes adding the beacon frequency to a mobile assisted handoff (MAHO) list in a telecommunications switch” (col. 6/lines 4-39).

As for claim 12, Chawla shows further “comprising determining whether the cell site and the other cell site may be selected for frequency re-use based on determining the frequency interference” (col. 3/lines 22-45 for neighbor list and reuse the same or adjacent channels within the neighbor cells list).

As for claim 13, Chawla further shows “comprising selecting a trigger frequency to simulate a hand-off situation for the second wireless device” (col. 19/line 65 to col. 20/line 13 for selecting a quality frequency for handoff as suggested in col. 6, lines 4-23 for MAHO).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Bahl et al, Duplessis et al, Sevcik et al. and Seaholtz et al. (in PTO 892 attached) disclose systems related to MAHO and beacon frequency for frequency reuse schemes.

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

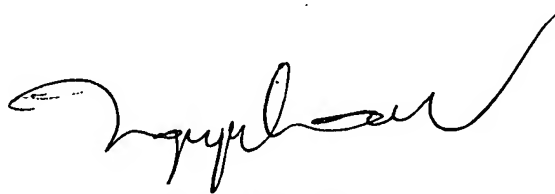
**(703) 872-9306, (for Technology Center 2600 only)**



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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tony T. Nguyen', with a stylized flourish at the end.

**TONY T. NGUYEN  
PATENT EXAMINER**

Tony T. Nguyen  
Art Unit 2685  
April 21, 2005